| Computer Science |  |
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| Teacher in charge of subject | Mr Steed |
| Type of qualification | A level |
| Exam board and subject code | OCR (H446) QAN = 601/4911/5 |
| Entry requirements |  |
| Specific subject requirement | Grade 5 in GCSE Computing or Merit in BTEC IT or equivalent. |
| Course details |  |
| Computer Fundamentals. Students look at computing fundamentals, including hardware and software; the presentation, structure and management of data; how data is transmitted and networked; the life cycle of systems development; the characteristics of information systems; and the implications of computer use. <br> Programming techniques and logical methods. Students learn about designing solutions to particular problems; how procedural programs are structured; the types of data and data structures; the common facilities of procedural languages; how to write maintainable programs; and how to test and run solutions. <br> Advanced Computing Theory. Students understand the function of operating systems; the function and purpose of translators; how computer architectures are structured; how data is represented, structured and manipulated; high-level language programming paradigms; low-level languages; and how databases function. <br> Computing Project. Through coursework, students gain an understanding of definition, investigation and analysis; system design; software development and testing; documentation; evaluation; and how to produce written reports covering these topics. The coursework is internally assessed and externally moderated. |  |
| Assessment |  |
| Computer systems 2 hours and 30 minutes written paper (40\%) <br> Algorithms and programming 2 hours and 30 minutes written paper (40\%) <br> Programming project Non-exam assessment (20\%) |  |
| Career options |  |
| This specification has been designed for students who wish to go on to higher education courses or employment where knowledge of Computing would be beneficial. Students can study Computing and go on to a career in Medicine, Law, Business, Politics or any type of Science. |  |

